UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/938,373	08/23/2001	Harry S. Hvostov	M-11996 US	1562

7590 04/06/2005	**EXAMINER**
Sawyer Law Group 2465 E. Bayshore Road Suite 406 Palo Alto, CA 94303	EMDADI, KAMRAN

ART UNIT	PAPER NUMBER
2667	

DATE MAILED: 04/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO 90C (Rev 10/03)

	Application No.	**Applicant(s)**
Office Action Summary	09/938,373	HVOSTOV ET AL.
	Examiner	**Art Unit**	
	Kamran Emdadi	2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 August 2001*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

DETAILED ACTION

Claim Objections

Claim 1 is objected to because of the following informalities: input/output ports are first introduced without an acronym identifier (i.e. media access controllers (MACs)). The claim further refers to I/O ports without first identifying the acronym (I/O). In other words, to be more consistent with the introduction of (MACs) it would be prudent to include the acronym identifier (I/O) after "input/output" in the claim language to avoid ambiguity. Appropriate correction is required.

Claims 8-11 are objected to for improper claim language, namely, "a file identifying support services" is described in claim 8 as a function of the server, however, it is unclear whether "a file identifying support services" is a separate element that may be used separately from the server or as a function of the server's capabilities. Appropriate correction is required.

Claim 19 is objected to and should read at line 11 "a plurality of media access controllers."

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1-11, 13, 18-21 and 23-28 are rejected under 35 U.S.C. 102(b) as being

anticipate by Haddock et al. (U.S. Patent No. 6,104,700).

Regarding claim 1, Haddock teaches a mechanism for managing traffic within a

network and allocating bandwidth to achieve a certain quality of service (QoS). The

teachings of Haddock include a plurality of MAC devices on a network communicating

via I/O ports, and bandwidth allocation (see Abstract and Column 3, lines 37-40 and 45-

47). A bandwidth allocation request and allocating bandwidth based on the request

(see column 8, lines 9-15). A defined time period or interval being identified at a

forwarding device or server for bandwidth allocation (see column 13, lines: 32-33, 45-

50 and 65-67). A plurality of ports or end units associated with the bandwidth allocation

time and QoS requirements (see column 18, lines 22-25 and column 13, lines 65-67).

Regarding claims 2-4, 7, 13, 18 and 23 Haddock teaches bandwidth allocation

based on prior bandwidth allocation history (see column 13, lines 47-52); and a class of

service synonymous with a QoS.

Regarding claims 5 and 24, Haddock teaches performing bandwidth allocation

for specific types of traffic flows (column 13, lines 19-24).

Regarding claims 6 and 20, Haddock teaches a comparison engine 155, a QoS

category evaluation unit 175 and a scheduler 170 as separate processor units all

contributing separately to the bandwidth allocation process disclosed above (see figure

1B).

Regarding claims 8-11 and 26-28, Haddock teaches a class of service, a data

rate and burst rate (see column 8, lines 15-22 and 36-40).

Regarding claims 13 and 19, in addition to the above noted features with respect

to claim 1, Haddock teaches parsing packets at a plurality of ports and forwarding

requests for bandwidth to a first queue (column 11, lines 20-26 and 180 of figure 1b)

and calculating transmission intervals in response to bandwidth requests (column 12,

lines 1-4) transmitting the transmission interval packets from the QoS queues in an

order determined by one or more queueing schemes, and transmitting a packet in

incorporation with the time intervals.

Regarding claim 21, Haddock teaches a forwarding database memory 120 used

to store forwarding information (see column 4, lines 35-38).

Regarding claim 25, Haddock teaches video data QoS parameters including

certain delay requirements, similar to voice data traffic requirements (see column 8,

lines 41-45).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

Claims 12, 14, 16-17 and 22 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Haddock in view of Ofek (U.S. Patent No. 6,760,328).

As indicated above Haddock teaches a mechanism for managing traffic within a

MAC device network, and bandwidth allocation to achieve a certain quality of service

(QoS). Haddock is silent with regard to the specific features of a message packet, fiber

optics, and fixed time slots and transmission intervals defined by an offset of absolute

time. Ofek, however, discloses a method for transmitting data packets over a packet

switching network with varying speed links. The teachings of Ofek include a fiber optic

communications link (column 8, line 40), a packet header (figure 6A) including a time

stamp start time, a last process time or time of arrival and other indicators to identify a

traffic flow, which can be used to identify offset times for transmission intervals of fixed

slot times (see figure 4).

Motivation and evidence thereof to combine these two references is evident in

the background portions of their respective specifications. For instance, Haddock

discloses the need for a more efficient time priority scheduling mechanism for data

transmissions including bandwidth allocation and QoS attributes maintained and

performed centrally. Similarly, Ofek discloses a need for more efficient synchronization

where the timing is not used for routing and the packets are handled based on their

predefined attributes. Therefore, it would have been obvious to one of ordinary skill in

the art at the time the invention was made to have combined the packet features of

Ofek with the data distribution and bandwidth allocation of Haddock to arrive at most

efficient method of managing and handling packet data communications.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Haddock

in view of White et al. (U.S. Patent No. 5,517,500).

Regarding claim 15, Haddock teaches all of the above features but is silent with

regard to TDMA and a master clock time. White teaches a networking management

system that provides re-allocation of bandwidth (see Abstract) a master clock (BUS

BLK) (see figures 35 and 37) used with a TDMA system (figure 25).

The motivation to combine Haddock with White can be found in the Background

portions of their specifications. White discloses a need for packet switched data

handling with a minimized amount of controlling procedures for improved efficiency of

associated devices and easy re-allocation of bandwidth. Similarly, Haddock discloses

the need for a more efficient time priority scheduling mechanism for data transmissions

including bandwidth allocation and QoS attributes maintained and performed centrally.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to have combined the TDMA system of Ofek with the data

distribution and bandwidth allocation of Haddock to arrive at the features recited in claim

15.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Kamran Emdadi whose telephone number is 571-272-

6047. The examiner can normally be reached M-F between the hours of 7am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Kamran Emdadi

03-31-2005

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